

```
g nodes :
1 2 3 4 5 6 7 8 9 11 12 13 14 15 16 17 18 19 20 21 22
in bonds :
7-10 9-32 10-12 15-17 25-26 27-28
g bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 11-12 11-16 12-13 13-14 14-15
15-16 17-18 17-22 18-19 19-20 20-21 21-22
ct/norm bonds :
6-9 8-9 9-32 10-12 11-12 11-16 12-13 13-14 14-15 15-16 15-17 25-26 27-28
ct bonds :
5-7 7-8 7-10
malized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 17-18 17-22 18-19 19-20 20-21 21-22
lated ring systems :
containing 1 : 17 :
```

S,[*1],[*2]

ch level :
 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:Atom
 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
 22:Atom 25:CLASS 26:CLASS 27:CLASS 28:CLASS 32:CLASS

=> s 11

SAMPLE SEARCH INITIATED 16:13:07 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -78 TO ITERATE

100.0% PROCESSED

78 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

1031 TO

PROJECTED ANSWERS:

1 TO

L2

1 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 16:13:20 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1525 TO ITERATE

100.0% PROCESSED 1525 ITERATIONS 37 ANSWERS

SEARCH TIME: 00.00.01

37 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

155.84 156.05

FILE 'CAPLUS' ENTERED AT 16:13:27 ON 02 APR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 2 Apr 2004 VOL 140 ISS 15 FILE LAST UPDATED: 1 Apr 2004 (20040401/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L46 L3

=> d l4 1-6 bib abs hitstr

L4

```
2003:656572 CAPLUS
ΑN
DN
      139:197363
      Preparation of 1-arylsulfonyl-3-substituted indoles and indolines for the
TI
      treatment of central nervous system disorders
      Spinks, Daniel; Armer, Richard E.; Miller, David J.; Rankovic, Zoran;
IN
      Spinks, Gayle; Mestres, Jordi; Jaap, David Robert
      Akzo Nobel N.V., Neth.
PΑ
SO
      PCT Int. Appl., 41 pp.
      CODEN: PIXXD2
DT
      Patent
      English
LΑ
FAN.CNT 1
                                                       APPLICATION NO.
                                                                             DATE
      PATENT NO.
                            KIND DATE
                                                       ______
                                                       WO 2003-EP50010 20030205
                                    20030821
PΙ
      WO 2003068220
                             Α1
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
                 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
                 RU, TJ, TM
            RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
                 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
                 ML, MR, NE, SN, TD, TG
                                    20020212
PRAI EP 2002-75584
                            Α
      MARPAT 139:197363
os
GI
```

ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

Ι

The title compds. [I; Ar = (un)substituted (hetero)aryl; n = 0-1; m = 0-5; R6 = H, alkyl, alkoxy, etc.; R7 = H, alkyl, aryl, arylalkyl; or R7 together with R9 or with one of R8 forms 4-7 membered saturated ring; R8 = H, alkyl, aryl; or one of R8 together with R7 or R9 or the geminal R11 forms 4-7 membered saturated ring, and other R8 = H, alkyl or (un)substituted aryl; R9, R10 = H, alkyl, aryl, arylalkyl; or NR9R10 = 5-7 membered (un)saturated ring optionally containing O or N atoms; R11 = H, alkyl; or one of R11 together with R10 or with the geminal R8 forms 4-7 membered saturated ring, and the other R11 = H, alkyl], useful in the treatment of central nervous disorders such as psychosis, schizophrenia, manic depressions, depressions, neurol. disorders, cognitive enhancement, Parkinson's disease, amyotrophic lateral sclerosis, Alzheimer's disease and Huntington's disease, were prepared E.g., a 4-step synthesis of II (starting from 1H-indole-3-carboxylic acid) which showed pKi of > 7.5 against 5-HT6 receptor binding, was given. Pharmaceutical composition comprising the compound I is claimed.

IT 583814-67-9P 583814-79-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1-arylsulfonyl-3-substituted indoles and indolines for the treatment of central nervous system disorders)

RN 583814-67-9 CAPLUS

CN Piperazine, 1-[[2,3-dihydro-1-[(4-methoxy-1-naphthalenyl)sulfonyl]-1H-indol-3-yl]carbonyl]-4-phenyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 583814-66-8 CMF C30 H29 N3 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

583814-79-3 CAPLUS
Piperazine, 1-[[2,3-dihydro-1-[(4-methoxy-1-naphthalenyl)sulfonyl]-1H-indol-3-yl]carbonyl]-4-(3-methoxyphenyl)-, mono(trifluoroacetate) (9CI) CN

CM

CRN 583814-78-2 C31 H31 N3 O5 S CMF

CM2

CRN 76-05-1 C2 H F3 O2 CMF

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
L4
       2002:504779 CAPLUS
AN
DN
       137:78967
       Preparation of 3-{2-[4-phenylpiperazino(or piperidino)]ethyl}indolines
TI
       useful in the treatment of psychiatric and neurologic disorders
       Kehler, Jan; Bang-Andersen, Benny
IN
       H. Lundbeck A/S, Den.
PA
SO
       PCT Int. Appl., 31 pp.
       CODEN: PIXXD2
DT
       Patent
LA
       English
FAN.CNT 1
       PATENT NO.
                             KIND
                                     DATE
                                                         APPLICATION NO.
                                                                                DATE
                                                         ______
                             ----
       WO 2002051833
                              Α1
                                     20020704
                                                         WO 2001-DK835
PI
                                                                                20011218
                 AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
                 CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
                 KG, KZ, MD, RU
            RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
                 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
       EP 1345921
                              Α1
                                     20030924
                                                         EP 2001-271969
                                                                              20011218
                 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
       NO 2003002636
                                     20030611
                                                         NO 2003-2636
                                                                                20030611
       US 2004044007
                               A1
                                     20040304
                                                         US 2003-601347
                                                                                20030617
PRAI
      DK 2000-1931
                               Α
                                      20001222
       WO 2001-DK835
                               W
                                      20011218
os
       MARPAT 137:78967
GΙ
```

The title compds. [I; R1 = acyl, thioacyl, trifluoromethylsulfonyl, etc.; n = 1-6; X = C, CH, N, and the dotted line emanating from X indicates a bond when X = C and no bond when X = N or CH; R2, R12, R13 = H, alkyl; R3-R11 = H, halo, CN, etc.] or their pharmaceutically acceptable acid addition salts, useful in the treatment of psychiatric and neurol. disorders, in particular psychoses, were prepared and formulated. Thus, alkylating 1-(3,4-dimethylphenyl)piperazine with (+)-2-(1-acetyl-2,3-dihydro-1H-indol-3-yl)ethyl bromide in the presence of K2CO3 in MeCN afforded the piperazine I.HCl [R1 = COMe; n = 2; X = N; R2-R7, R10-R13 = H; R8, R9 =

Ι

Me] which showed 88% inhibition at the D4 receptor at 50 nM and IC50 of $5.0\,$ nM at the 5-HT2A receptor.

IT 439933-75-2P 439933-76-3P 439933-78-5P 439933-79-6P 439933-83-2P 439933-84-3P 439933-85-4P 439933-86-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of $3-\{2-[4-phenylpiperazino (or piperidino)] ethyl\}indolines useful in the treatment of psychiatric and neurol. disorders)$

RN 439933-75-2 CAPLUS

CN 1H-Indole, 1-acetyl-3-[2-[4-(3,4-dimethylphenyl)-1-piperazinyl]ethyl]-2,3-dihydro-, hydrochloride, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

•x HCl

RN 439933-76-3 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-3-[2-[4-(4-methylphenyl)-1-piperazinyl]ethyl]-, hydrochloride, (+)- (9CI) (CA INDEX NAME)

•x HCl

RN 439933-78-5 CAPLUS
CN 1H-Indole, 1-acetyl-3-[2-[4-(3,4-dichlorophenyl)-1-piperazinyl]ethyl]-2,3-dihydro-, hydrochloride, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

●x HCl

RN 439933-79-6 CAPLUS
CN 1H-Indole, 1-acetyl-3-[2-[4-(4-bromophenyl)-1-piperazinyl]ethyl]-2,3-dihydro-, hydrochloride, (+)- (9CI) (CA INDEX NAME)

●x HCl

RN 439933-83-2 CAPLUS
CN 1H-Indole, 1-acetyl-3-[2-[4-(3,4-dimethylphenyl)-1-piperazinyl]ethyl]-2,3-dihydro-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

RN 439933-84-3 CAPLUS
CN 1H-Indole, 1-acetyl-2,3-dihydro-3-[2-[4-(4-methylphenyl)-1-piperazinyl]ethyl]-, (+)- (9CI) (CA INDEX NAME)

RN

439933-85-4 CAPLUS
1H-Indole, 1-acetyl-3-[2-[4-(3,4-dichlorophenyl)-1-piperazinyl]ethyl]-2,3-dihydro-, (+)- (9CI) (CA INDEX NAME) CN

Rotation (+).

RN 439933-86-5 CAPLUS

1H-Indole, 1-acetyl-3-[2-[4-(4-bromophenyl)-1-piperazinyl]ethyl]-2,3-CNdihydro-, (+)- (9CI) (CA INDEX NAME)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN L4

AN 1991:17582 CAPLUS

DN 114:17582

Preparation of piperazinyl derivatives, and their use as serotoninergic ΤI agonists in the treatment of central nervous system disorders

Perregaard, Jens; Stenberg, John Willie IN

Lundbeck, H., og Co. A/S, Den. Eur. Pat. Appl., 18 pp. PΑ

SO

CODEN: EPXXDW

DTPatent

LΑ English

FAN.CNT 1

	CNT 1				
				APPLICATION NO.	DATE
PΙ				EP 1989-313371	19891220
	EP 376607				
	R: AT, BE, C	CH, DE	, ES, FR, GB,	GR, IT, LI, LU, NL	, SE
	DK 8906456	Α	19900629	DK 1989-6456	19891219
	DK 169266				
	AT 102184	E	19940315	AT 1989-313371	19891220
	ES 2062050			ES 1989-313371	
	CA 2006356	AA	19900628	CA 1989-2006356	19891221
	CA 2006356	C	19990914		
	AU 8947198	A1	19900705	AU 1989-47198	19891222
	AU 637991	В2	19930617		
			19910326	US 1989-456938	19891226
	NO 8905281	Α	19900629	NO 1989-5281	19891227
	NO 174772	В	19940328		
	NO 174772	С	19940706		
	JP 02225460	A2	19900907	JP 1989-336755	19891227
	JP 2895121	B2	19990524		
	ZA 8909960	Α	19901128	ZA 1989-9960	19891228
	FI 93005			FI 1989-6300	19891228
	FI 93005	C	19950210		-
	IL 92990	Ã1	19950124	IL 1990-92990	19900107
PRAI	GB 1988-30312		19881228		
	EP 1989-313371	Α	19891220		
os	MARPAT 114:17582				
GI					

Ι

$$\begin{array}{c|c}
 & \text{CH}_2)_4 - N & N - Ar \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & &$$

$$Y_{R5}$$
 Y_{1R5} Q_1 Y_{1R5} Q_2

The title derivs. I [dotted line is optional bond; X = CH, CH2, N(H), C:O; AB R1 = H, halogen, (un) branched C1-6 alk(en)yl, trifluoromethyl; R2 = H, (un)branched (un) substituted C1-6 alk(en)yl; Ar = Q1, Q2 (Y = O, S; Y1 = H, O, S, CH2; Z = O, S, CH2; n = 1-3; R5 = (un)branched <math>C1-6 alk(en)y1], and their pharmaceutically acceptable acid addition salts and stereoisomers, are prepared for use in treatment of central nervous system disorders, including anxiety, depression, and aggression, or in diseases related to cardiovascular, renal, and gastrointestinal systems. Methods of preparation of I and pharmaceutical compns. containing I are also provided. I have central serotonin activity with preference for the 5-HT1A receptor. Thus, 3-[4-(4-(2-methoxyphenyl)-1-piperazinyl)-1-butyl]-1H-2,3-dihydroindole dioxalate (preparation given) inhibited 5-methoxy-N,N-dimethyltryptamineinduced 5-HT syndrome in rats with ED50 = 1.9 \(\mu mole/kq. \) A tablet formulation contained 3-[4-(4-(1,4-benzodioxan-5-yl)-1-piperazinyl)-1butyl]-1H-2,3-dihydroindole dioxalate 5, lactose 18, potato starch 27, saccharose 58, sorbitol 3, talcum 5, gelatine 2, povidone 1, and Mg stearate 0.5 mg.

IT 131084-14-5P

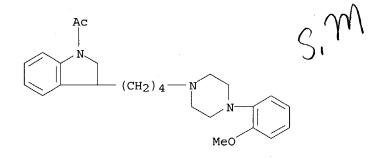
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, for serotoninergic 5-HT1A agonist)

RN 131084-14-5 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-3-[4-[4-(2-methoxyphenyl)-1-piperazinyl]butyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 131084-13-4 CMF C25 H33 N3 O2



CM 2

CRN 144-62-7 CMF C2 H2 O4

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1976:44150 CAPLUS

DN 84:44150

TI 3-[2-(4-Phenyl-1-piperazinyl)ethyl]-indolines

IN Allen, George Rodger, Jr.; McEvoy, Francis J.; VeVries, Vern G.; Moran, Daniel B.; Littell, Ruddy

PA American Cyanamid Co., USA

SO U.S., 13 pp.

CODEN: USXXAM

DT Patent

LA English

FAN. CNT 2

FAN.CNI 2								
		PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
	PΙ	US 3900563	A	19750819	US 1974-473029	19740524		
		US 3751416	Α	19730807	US 1971-147700	19710527		
		ES 409283	A 1	19760316	ES 1972-409283	19721204		
		CA 1056821	A2	19790619	CA 1977-276961	19770426		
	PRAI	US 1971-147700		19710527				
		US 1973-371201		19730618				
		CA 1972-140989		19720501				
		ES 1972-403245		19720527				

GI For diagram(s), see printed CA Issue.

AB The title indoles I (R = H, MeCO, PhCO; R1 = H, Me; R2 = R3 = MeO, R2R3 = OCH2O) were prepared Thus, 5,6-dimethoxyoxindole was treated with EtO2CCO2Et followed by reduction and acetylation to give 1-acetyl-5,6-dimethoxy-3-indoleethanol which with 1-(o-methoxyphenyl)piperazine gave I (R = MeCO, R1 = H, R2 = R3 = MeO) (II). At 1 mg/kg (oral) II caused a 50% reduction in the motor activity in mice.

IT 40118-62-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and central nervous activity)

RN 40118-62-5 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5,6-dimethoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Ac} \\ \text{MeO} \\ \text{N} \\ \text{CH}_2 - \text{CH}_2 \\ \\ \text{MeO} \\ \end{array}$$

excluded funds

IT 40118-78-3P 40118-79-4P 49632-84-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 40118-78-3 CAPLUS

CN 1H-Indole, 1-benzoyl-2,3-dihydro-5,6-dimethoxy-2-methyl-3-[2-(4-phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

40118-79-4 CAPLUS RN

1H-Indole, 1-benzoyl-2,3-dihydro-5,6-dimethoxy-3-[2-[4-(2-methoxyphenyl)-1-CNpiperazinyl]ethyl]-2-methyl- (9CI) (CA INDEX NAME)

49632-84-0 CAPLUS RN

1H-Indole, 1-benzoyl-2,3-dihydro-5,6-dimethoxy-3-[2-[4-(2-methoxyphenyl)-1-CN piperazinyl]ethyl]-2-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

2 HCl

```
ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
L4
     1973:492287 CAPLUS
AN
DN
     79:92287
     1-Acyl-3-(2-[4-phenyl-1-piperazinyl)ethyl]indolines
TI
     Allen, George Rodger, Jr.; McEvoy, Francis J.; De Vries, Vern G.; Moran,
IN
     Daniel B.; Littell, Ruddy
     American Cyanamid Co.
PΑ
SO
     U.S., 14 pp.
     CODEN: USXXAM
DT
     Patent
T<sub>1</sub>A
     English
FAN.CNT 1
                                           APPLICATION NO.
                                                             DATE
                      KIND DATE
     PATENT NO.
                      ----
                            _____
                                           ______
                                                             _____
                            19730807
                                           US 1971-171319
                                                             19710812
PI
     US 3751417
                       Α
PRAI US 1971-171319
                            19710812
     For diagram(s), see printed CA Issue.
GΙ
     Preparation of the title indoline derivs. with analgesic properties is
AΒ
     described. In an example, 1-acetyl-3-indolineacetic acid (I) was reduced
     (borane/THF) to the alc. II which on treatment with PBr3 gave III. III on
     reaction with 1-phenylpiperazine gave IV (R1 = R2 = R3 = H, R4 = Ac).
     Also reported are IV [R1 = 5,6-(MeO)2, 5,6-methylenedioxy; R2 = H, Me; R3
     = H, MeO; R4 = Bz, p-ClC6H4CO, p-O2NC6H4CO, EtCO, Ac, PrCO].
     40118-60-3P 40118-61-4P 40118-62-5P
IT
     40118-63-6P 40118-64-7P 40118-65-8P
     40118-68-1P 40118-71-6P 40118-72-7P
     40118-74-9P 40118-75-0P 40118-76-1P
     40118-77-2P 40118-78-3P 40118-80-7P
     40118-95-4P 40118-96-5P 49632-84-0P
     49716-73-6P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
     40118-60-3 CAPLUS
RN
     1H-Indole, 1-acetyl-2,3-dihydro-3-[2-(4-phenyl-1-piperazinyl)ethyl] - (9CI)
CN
       (CA INDEX NAME)
```

RN 40118-61-4 CAPLUS
CN 1H-Indole, 1-acetyl-2,3-dihydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

exel.

RN 40118-62-5 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5,6-dimethoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \end{array}$$

RN 40118-63-6 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5,6-dimethoxy-3-[2-(4-phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 40118-64-7 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5,6-dimethoxy-3-[2-[4-(4-methoxyphenyl)-3-methyl-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & Ac \\ \hline \\ \text{MeO} & \\ \hline \\ \text{MeO} & \\ \hline \\ \text{CH}_2-\text{CH}_2-\\ \hline \\ \text{N} & \\ \hline \\ \text{OMe} & \\ \hline \\ \text{OMe} & \\ \hline \end{array}$$

RN 40118-65-8 CAPLUS CN 1H-Indole, 1-acetyl-2,3-dihydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-nitro- (9CI) (CA INDEX NAME)

$$CH_2-CH_2-N$$
MeO

RN 40118-68-1 CAPLUS CN 1H-Indole, 2,3-dihydro-5-methoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-2-methyl-1-(4-nitrobenzoyl)- (9CI) (CA INDEX NAME)

$$C = 0$$
 $C = 0$
 $M = 0$
 $M = 0$

RN 40118-71-6 CAPLUS
CN 1H-Indole, 1-acetyl-5-chloro-2,3-dihydro-3-[2-[3-methyl-4-(3-methylphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ac} \\ & \\ & \\ \text{C1} \end{array}$$

RN 40118-72-7 CAPLUS
CN 1H-Indole, 1-acetyl-2,3-dihydro-5-methoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-2-methyl- (9CI) (CA INDEX NAME)

40118-74-9 CAPLUS RN

 $1 \\ \\ \text{H-Indole, 1-acetyl-2,3-dihydro-5-methoxy-2-methyl-3-[2-(4-phenyl-1-phenyl-$ CNpiperazinyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ac} & \\ & & \text{Me} \\ \hline & \text{CH}_2 - \text{CH}_2 - \\ & & \text{N} \\ & & \text{Ph} \\ \end{array}$$

RN

40118-75-0 CAPLUS 1H-Indole, 1-acetyl-3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-2,3-CNdihydro-5-methoxy-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ac} & \\ & &$$

40118-76-1 CAPLUS RN

1H-Indole, 1-(4-chlorobenzoyl)-2,3-dihydro-5-methoxy-2-methyl-3-[2-(4-CNphenyl-1-piperazinyl)ethyll- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Cl} \\ \\ \text{C} \\ \text{C} \\ \text{O} \\ \\ \text{MeO} \end{array}$$

RN 40118-77-2 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5-methoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-2-methyl-6-nitro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Ac \\ \hline \\ N \\ MeO \end{array}$$

RN 40118-78-3 CAPLUS

CN 1H-Indole, 1-benzoyl-2,3-dihydro-5,6-dimethoxy-2-methyl-3-[2-(4-phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{C-Ph} \\ \text{MeO} \\ \text{N} \end{array} \begin{array}{c} \text{Me} \\ \text{CH}_2 - \text{CH}_2 \\ \text{N} \end{array} \begin{array}{c} \text{N} \\ \text{Ph} \\ \end{array}$$

RN 40118-80-7 CAPLUS

CN 1H-Indole, 1-benzoyl-3-[2-[4-(3-chlorophenyl)-1-piperazinyl]ethyl]-2,3-dihydro-5,6-dimethoxy-2-methyl- (9CI) (CA INDEX NAME)

RN 40118-95-4 CAPLUS

CN 1H-Indol-5-amine, 1-acetyl-2,3-dihydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$Ac$$
 N
 CH_2-CH_2
 N
 MeO

RN 40118-96-5 CAPLUS

CN 1H-Indol-5-amine, 1-acetyl-2,3-dihydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

$$Ac$$
 N
 N
 CH_2-CH_2
 N
 Me_2N
 Me_0

RN 49632-84-0 CAPLUS

CN 1H-Indole, 1-benzoyl-2,3-dihydro-5,6-dimethoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-2-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{C-Ph} \\ \text{MeO} \\ \text{MeO} \\ \end{array}$$

•2 HCl

RN 49716-73-6 CAPLUS

CN 1H-Indole, 1-benzoyl-2,3-dihydro-5,6-dimethoxy-2-methyl-3-[2-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{C-Ph} \\ \text{MeO} \\ \text{N} \\ \text{MeO} \\ \text{CH}_2\text{-CH}_2\text{-N} \\ \text{N} \\ \text{CF}_3 \\ \end{array}$$

● HCl

```
ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
L4
AN
     1973:84255 CAPLUS
DN
     78:84255
     3-[2-(4-Phenyl-1-piperazinyl)ethyl]indolines
TI
     Allen, George Rodger, Jr.; McEvoy, Francis Joseph; DeVries, Vern Gordon;
TN
     Moran, Daiel Bryan; Litell, Ruddy
     American Cyanamid Co.
PA
     Ger. Offen., 87 pp.
SO
     CODEN: GWXXBX
DT
     Patent
LA
     German
FAN.CNT 2
                       KIND DATE
                                             APPLICATION NO.
                                                               DATE
     PATENT NO.
                       - - - -
                                             _____
                                                               _____
                             _____
                             19721207
                                             DE 1972-2225765
                                                               19720526
ΡI
     DE 2225765
                        Α
     US 3751416
                        Α
                             19730807
                                             US 1971-147700
                                                               19710527
     ZA 7202916
                             19730228
                                             ZA 1972-2916
                                                               19720501
                        Α
                                             CA 1972-140989
     CA 1014154
                             19770719
                                                               19720501
                        Α1
     GB 1382916
                             19750205
                                             GB 1972-20674
                                                               19720503
                        Α
     GB 1382917
                             19750205
                                             GB 1973-56237
                                                               19720503
                        Α
     AU 7241918
                        Α1
                             19731108
                                             AU 1972-41918
                                                               19720504
                                             CS 1972-3454
     CS 185203
                        Ρ
                             19780915
                                                               19720519
                                             CS 1976-248
     CS 185244
                        P
                             19780915
                                                               19720519
                                             CS 1976-251
     CS 185245
                        Р
                             19780915
                                                               19720519
                                             PL 1972-155596
     PL 81987
                        Р
                             19751031
                                                               19720525
     PL 92635
                        P
                             19770430
                                             PL 1972-176213
                                                               19720525
                                             PL 1972-176214
     PL 92634
                        Ρ
                             19770430
                                                               19720525
     PL 92627
                        Ρ
                             19770430
                                             PL 1972-176212
                                                               19720525
     BE 784012
                        Α1
                             19721127
                                             BE 1972-117944
                                                               19720526
                                             NL 1972-7129
     NL 7207129
                        Α
                             19721129
                                                               19720526
     FR 2139158
                        Α1
                             19730105
                                             FR 1972-18968
                                                               19720526
                                             DD 1972-163237
                                                               19720526
     DD 100471
                        C
                             19730920
     SU 489321
                        D
                             19751025
                                             SU 1972-1792254
                                                               19720526
                                             SU 1972-1960739
                                                               19720526
     SU 489322
                        D
                             19751025
                                             CH 1972-7843
     CH 579563
                        Α
                             19760915
                                                               19720526
                                             RO 1972-71032
     RO 60145
                        ₽
                             19760915
                                                               19720526
     CH 582172
                        Α
                              19761130
                                             CH 1976-7598
                                                               19720526
                                             CH 1976-7597
     CH 582142
                        Α
                              19761130
                                                               19720526
                                             CH 1976-7596
     CH 583701
                        Α
                              19770114
                                                               19720526
                                             CH 1976-7595
     CH 583700
                        Α
                              19770114
                                                               19720526
                                             NO 1972-1869
                                                               19720526
     NO 136795
                        В
                              19770801
                                             SE 1972-6918
     SE 395455
                        В
                              19770815
                                                               19720526
                                             SE 1974-2374
                                                               19720526
     SE 397524
                        В
                              19771107
                                             SE 1974-2375
                              19771107
                                                               19720526
     SE 397525
                        В
     RO 63715
                        Р
                              19781015
                                             RO 1972-80196
                                                               19720526
     RO 63730
                        Ρ
                              19781115
                                             RO 1972-80194
                                                               19720526
                        Ρ
                                             RO 1972-80193
     RO 64489
                              19790515
                                                               19720526
                        P
     HU 166178
                                                               19720527
                              19750228
                                             HU 1972-AE360
     HU 167203
                        Ρ
                              19750927
                                             HU 1972-AE400
                                                               19720527
     HU 168720
                        Ρ
                                             HU 1972-AE401
                              19760728
                                                               19720527
                                             ES 1972-409284
     ES 409284
                                                               19721204
                        A1
                              19760316
     ES 409282
                        Α1
                              19760316
                                             ES 1972-409282
                                                               19721204
     ES 409281
                                             ES 1972-409281
                        Α1
                              19760316
                                                               19721204
                                             ES 1972-409283
     ES 409283
                                                               19721204
                        Α1
                              19760316
                                             US 1973-350445
     US 3900495
                              19750819
                                                               19730412
                        Α
                                             SU 1973-1953507
     SII 575024
                        D
                              19770930
                                                               19730726
     SU 488408
                        D
                              19751015
                                             SU 1973-1960738
                                                               19730913
     SE 7600531
                                             SE 1976-531
                                                               19760120
                        Α
                              19760120
      CA 1056821
                              19790619
                                             CA 1977-276961
                                                               19770426
                        A2
```

19710527

PRAI US 1971-147700

19720501 CA 1972-140989 ES 1972-403245 19720527 For diagram(s), see printed CA Issue. GI Approx. 60 piperazinylethylindolines I (R = Ac, Bz, H, etc.; R1 = Me, H; AB R2 = H, o-, p-MeO, o-, m-Me, o-, m-Cl, etc.; R3 = H, MeO, Br, O2N, Ac, etc.; R4 = MeO), tranquilizers, were prepared by reaction of a piperazine with a 3-(2-bromoethyl)indoline. Dosages of I for 50% reduction of motor activity in mice were given. IT 40118-93-2 RL: RCT (Reactant); RACT (Reactant or reagent) (hydrolysis of) 40118-93-2 CAPLUS 1H-Indole, 2,3-dihydro-5-methoxy-2-methyl-1-(4-nitrobenzoyl)-3-[2-(4-RN CN phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

 $\begin{array}{c} \text{NO}_2 \\ \\ \text{C} \\ \text{O} \\ \\ \text{N} \\ \text{MeO} \end{array}$

RN 40118-61-4 CAPLUS
CN 1H-Indole, 1-acetyl-2,3-dihydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 40118-62-5 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5,6-dimethoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & Ac \\ \hline \\ \text{MeO} & N \\ \hline \\ \text{MeO} & CH_2-CH_2-N \\ \hline \\ \text{MeO} & MeO \\ \end{array}$$

RN 40118-63-6 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5,6-dimethoxy-3-[2-(4-phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ac} \\ & \\ \text{MeO} \\ & \\ \text{MeO} \\ & \\ \text{CH}_2 - \text{CH}_2 - \text{N} \\ & \\ & \\ \text{Ph} \\ \end{array}$$

RN 40118-64-7 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5,6-dimethoxy-3-[2-[4-(4-methoxyphenyl)-3-methyl-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ac} \\ & & \\ & & \\ \text{MeO} & & \\ & &$$

RN 40118-65-8 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-5-nitro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 40118-68-1 CAPLUS

CN 1H-Indole, 2,3-dihydro-5-methoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-2-methyl-1-(4-nitrobenzoyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{NO}_2 \\ \text{C} \\ \text{C} \\ \text{O} \\ \text{MeO} \end{array}$$

RN 40118-71-6 CAPLUS

CN 1H-Indole, 1-acetyl-5-chloro-2,3-dihydro-3-[2-[3-methyl-4-(3-methylphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 40118-72-7 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5-methoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & Ac \\ & & \\ N \\ & Me \\ \end{array}$$

RN 40118-73-8 CAPLUS

CN Acetamide, N-[1-acetyl-2,3-dihydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-1H-indol-5-yl]- (9CI) (CA INDEX NAME)

AcNH
$$CH_2-CH_2-N$$
MeO

RN 40118-74-9 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5-methoxy-2-methyl-3-[2-(4-phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ac} & \\ & & \\ & & \\ \text{MeO} & \\ & &$$

RN 40118-75-0 CAPLUS

CN 1H-Indole, 1-acetyl-3-[2-[4-(2-chlorophenyl)-1-piperazinyl]ethyl]-2,3-dihydro-5-methoxy-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Ac \\ \hline \\ N \\ \hline \\ MeO \\ \hline \\ CH_2-CH_2-N \\ \hline \\ C1 \\ \hline \\ C1 \\ \hline \end{array}$$

RN 40118-76-1 CAPLUS

CN 1H-Indole, 1-(4-chlorobenzoyl)-2,3-dihydro-5-methoxy-2-methyl-3-[2-(4-phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

$$C1$$
 $C=0$
 MeO
 CH_2-CH_2-N
 Ph

RN 40118-77-2 CAPLUS

CN 1H-Indole, 1-acetyl-2,3-dihydro-5-methoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-2-methyl-6-nitro- (9CI) (CA INDEX NAME)

$$O_2N$$
 N
 Me
 CH_2-CH_2
 N
 MeO

RN 40118-78-3 CAPLUS

CN 1H-Indole, 1-benzoyl-2,3-dihydro-5,6-dimethoxy-2-methyl-3-[2-(4-phenyl-1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{C-Ph} \\ \text{N} \end{array}$$

RN 40118-79-4 CAPLUS

CN 1H-Indole, 1-benzoyl-2,3-dihydro-5,6-dimethoxy-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 40118-80-7 CAPLUS

CN 1H-Indole, 1-benzoyl-3-[2-[4-(3-chlorophenyl)-1-piperazinyl]ethyl]-2,3-dihydro-5,6-dimethoxy-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{C-Ph} \\ \text{MeO} \\ \text{N} \end{array} \begin{array}{c} \text{Me} \\ \text{CH}_2 - \text{CH}_2 - \text{N} \\ \text{Cl} \end{array}$$

RN 40118-81-8 CAPLUS

CN 1H-Indole, 1-benzoyl-2,3-dihydro-5,6-dimethoxy-2-methyl-3-[2-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 40118-95-4 CAPLUS

CN 1H-Indol-5-amine, 1-acetyl-2,3-dihydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

$$H_2N$$
 CH_2-CH_2
 N
 MeO

RN 40118-96-5 CAPLUS

CN 1H-Indol-5-amine, 1-acetyl-2,3-dihydro-3-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ac} \\ & \\ & \\ \text{Me}_2 \text{N} \end{array}$$

=> file caold SINCE FILE TOTAL COST IN U.S. DOLLARS ENTRY SESSION 185.03 28.98 FULL ESTIMATED COST TOTAL SINCE FILE DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) ENTRY SESSION -4.16 -4.16 CA SUBSCRIBER PRICE

FILE 'CAOLD' ENTERED AT 16:14:04 ON 02 APR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s 13 L5 0 L3

=> log h SINCE FILE COST IN U.S. DOLLARS TOTAL ENTRY SESSION FULL ESTIMATED COST 0.42 185.45 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY CA SUBSCRIBER PRICE -4.16 0.00

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 16:14:12 ON 02 APR 2004